

International relations in science and medicine:

Three case studies

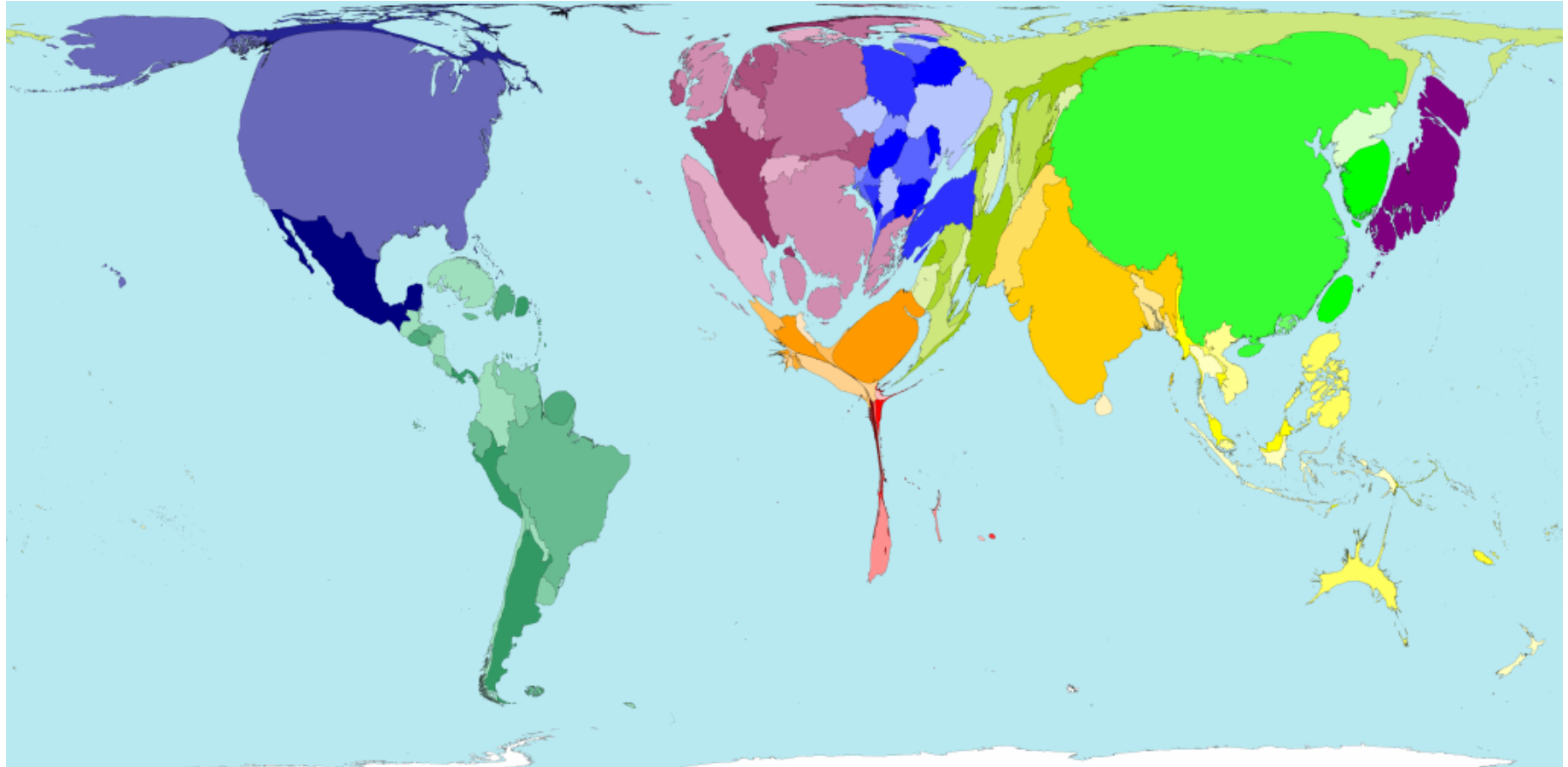
Case #2: The President's Emergency Plan For AIDS Relief (PEPFAR)

Harold Varmus

Kings College, London

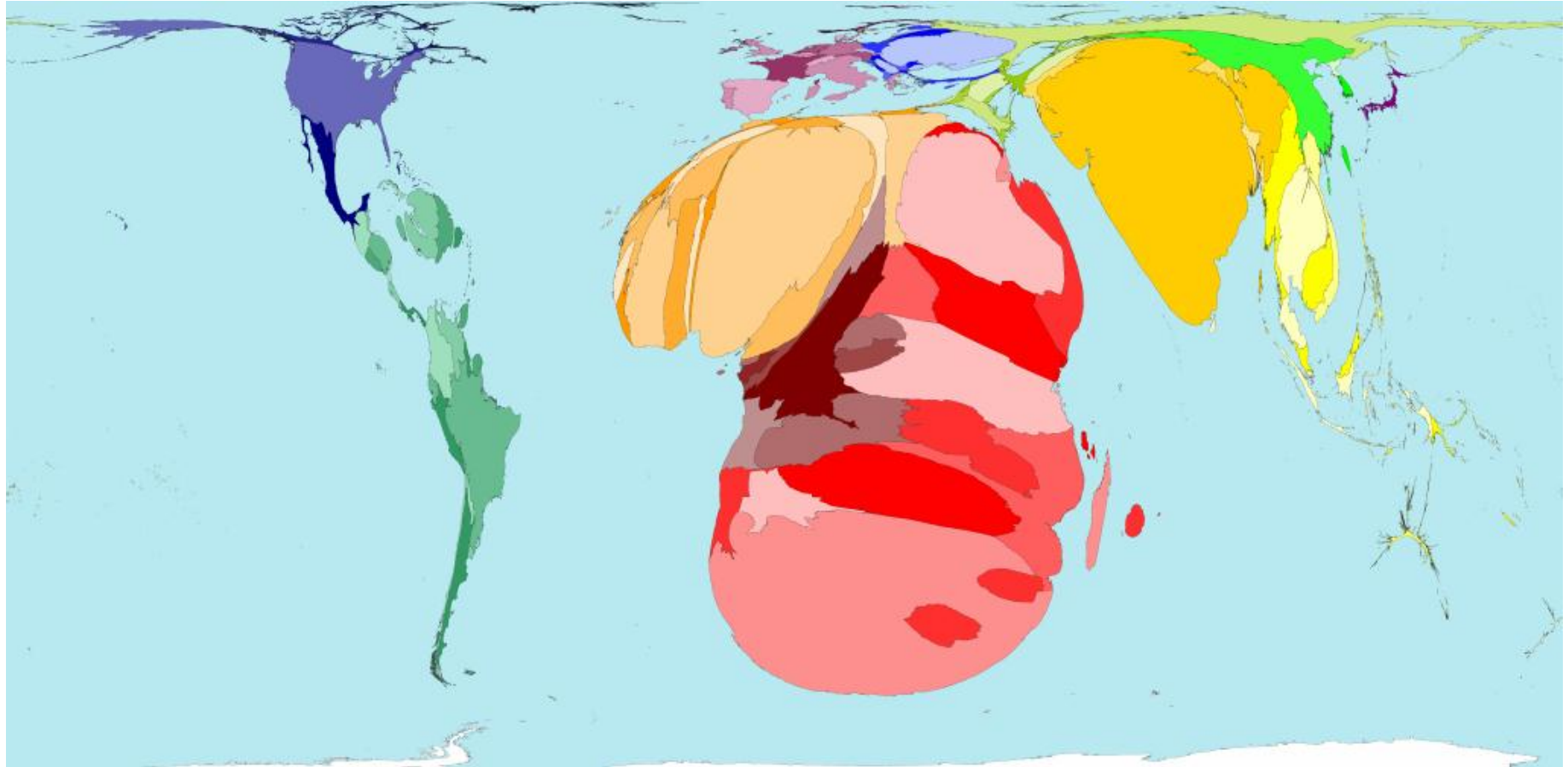
May 7, 2013

DISTRIBUTION OF 7.7 MILLION WORKING PHYSICIANS (2004)



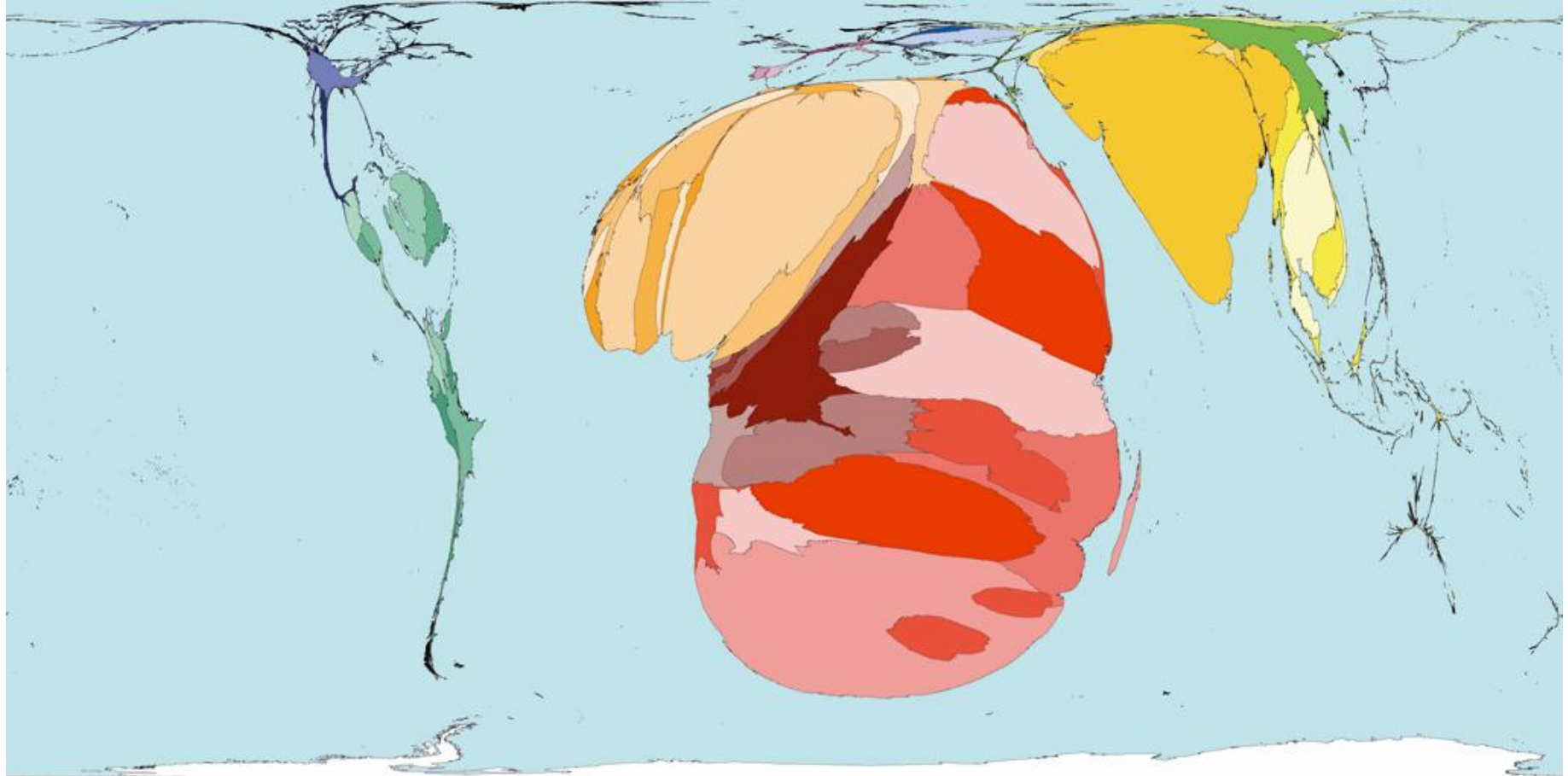
(Worldmapper #219)

DISTRIBUTION OF PEOPLE LIVING WITH HIV INFECTION (IN 2003, AGES 15-49)



(Worldmapper #227)

DISTRIBUTION OF 2.6 MILLION DEATHS FROM AIDS (2002)



Worldmapper #374

A BRIEF HISTORY OF AIDS

FRANCO-AMERICAN DIPLOMACY OVER DISCOVERY OF HIV



Luc Montagnier, Pasteur Institute

Robert Gallo, NIH

A BRIEF HISTORY OF AIDS AND EFFORTS TO CONTROL HIV

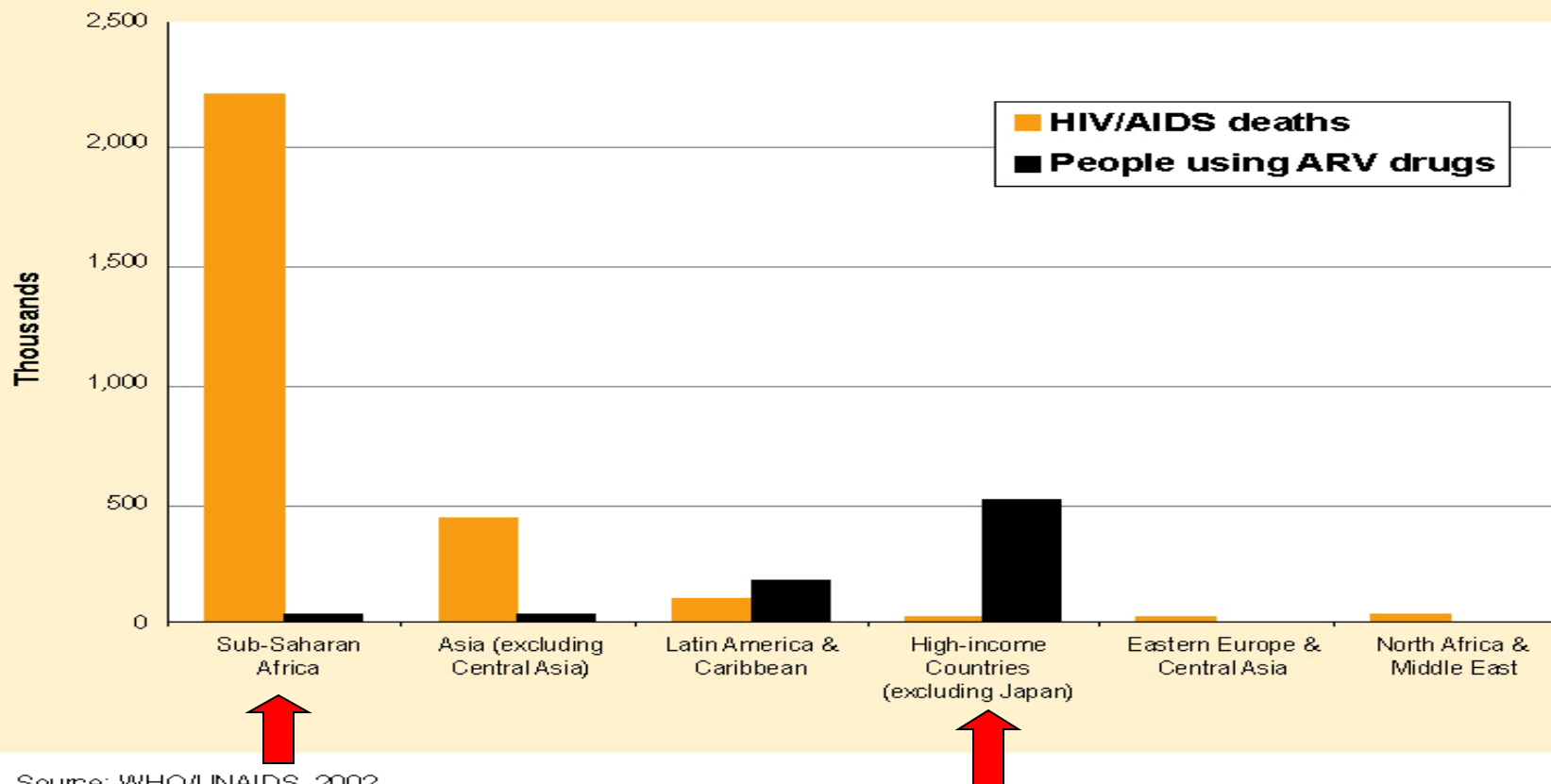
PREMATURE FORECASTS OF A VACCINE AGAINST AIDS



HHS Secretary Margaret Heckler with Robert Gallo, Feb 2004

Antiretroviral Therapy by Region--2001

HIV/AIDS deaths in 2001 and number of people using antiretroviral drugs by end 2001: by region



Source: WHO/UNAIDS, 2002

The Birth of PEPFAR

PRELUDES TO PEPFAR



CONDOLEEZZA RICE AND GEORGE W. BUSH

PRELUDES TO PEPFAR



KOFI ANNAN AND GW BUSH AT ANNOUNCEMENT
OF US SUPPORT FOR THE GLOBAL FUND, MAY 2001



BONO

KEY FIGURES IN THE WHITE HOUSE



JOSH BOLTON, DEPUTY CHIEF OF STAFF



GARY EDSON, SENIOR ADVISOR
DEPUTY, NSC

ARCHITECT-IN-CHIEF



ANTHONY (TONY) FAUCI, DIRECTOR,
NATIONAL INSTITUTE OF ALLERGY AND INFECTIOUS DISEASES

2002: TONY FAUCI GOES TO AFRICA



ON AN AIDS WARD IN UGANDA: 2002



DRAFTERS OF THE PLAN



MARK DYBAL

NIAID, Assistant to Director



RALPH TATE

NIAID, operations research

CHARTING THE PLAN

% of Cost Supported by U.S.

Target Country	Change Percentage of Individual Year and Country				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Botswana	100%	100%	90%	80%	70%
Cote d'Ivoire	100%	100%	100%	100%	90%
Ethiopia	100%	100%	100%	100%	100%
Kenya	100%	100%	100%	90%	90%
Mozambique	100%	100%	100%	100%	100%
Rwanda	100%	100%	100%	100%	100%
South Africa	100%	100%	90%	80%	70%
Uganda	100%	100%	100%	100%	90%
Namibia	100%	100%	100%	90%	80%
Nigeria	100%	100%	100%	100%	100%
Tanzania	100%	100%	100%	100%	100%
Zambia	100%	100%	100%	100%	100%
Guyana	100%	100%	100%	90%	80%
Haiti	100%	100%	100%	100%	90%
Russia	0%	0%	0%	0%	0%
China	0%	0%	0%	0%	0%
India	0%	0%	0%	0%	0%
Wgt Avg	58%	58%	56%	53%	50%

% of Prevention by Country

Target Country	Change Percentage of Individual Year and Country				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Botswana	25%	50%	75%	100%	100%
Cote d'Ivoire	25%	50%	75%	100%	100%
Ethiopia	25%	50%	75%	100%	100%
Kenya	25%	50%	75%	100%	100%
Mozambique	25%	50%	75%	100%	100%
Rwanda	25%	50%	75%	100%	100%
South Africa	25%	50%	75%	100%	100%
Uganda	25%	50%	75%	100%	100%
Namibia	25%	50%	75%	100%	100%
Nigeria	25%	50%	75%	100%	100%
Tanzania	25%	50%	75%	100%	100%
Zambia	25%	50%	75%	100%	100%
Guyana	25%	50%	75%	100%	100%
Haiti	25%	50%	75%	100%	100%
Russia	25%	50%	75%	100%	100%
China	25%	50%	75%	100%	100%
India	25%	50%	75%	100%	100%
Wgt Avg	25%	50%	75%	100%	100%

% of Patients Under Care by Country

Target Country	Change Percentage of Individual Year and Country				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Botswana	10%	20%	30%	40%	50%
Cote d'Ivoire	10%	20%	30%	40%	50%
Ethiopia	10%	20%	30%	40%	50%
Kenya	10%	20%	30%	40%	50%
Mozambique	10%	20%	30%	40%	50%
Rwanda	10%	20%	30%	40%	50%
South Africa	10%	20%	30%	40%	50%
Uganda	10%	20%	30%	40%	50%
Namibia	10%	20%	30%	40%	50%
Nigeria	10%	20%	30%	40%	50%
Tanzania	10%	20%	30%	40%	50%
Zambia	10%	20%	30%	40%	50%
Guyana	10%	20%	30%	40%	50%
Haiti	10%	20%	30%	40%	50%
Russia	10%	20%	30%	40%	50%
China	10%	20%	30%	40%	50%
India	10%	20%	30%	40%	50%
Wgt Avg	10%	20%	30%	40%	50%

% of Patients Under ARV Care by Country

Target Country	Change Percentage of Individual Year and Country				
	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Botswana	10%	20%	30%	40%	50%
Cote d'Ivoire	10%	20%	30%	40%	50%
Ethiopia	10%	20%	30%	40%	50%
Kenya	10%	20%	30%	40%	50%
Mozambique	10%	20%	30%	40%	50%
Rwanda	10%	20%	30%	40%	50%
South Africa	10%	20%	30%	40%	50%
Uganda	10%	20%	30%	40%	50%
Namibia	10%	20%	30%	40%	50%
Nigeria	10%	20%	30%	40%	50%
Tanzania	10%	20%	30%	40%	50%
Zambia	10%	20%	30%	40%	50%
Guyana	10%	20%	30%	40%	50%
Haiti	10%	20%	30%	40%	50%
Russia	10%	20%	30%	40%	50%
China	10%	20%	30%	40%	50%
India	10%	20%	30%	40%	50%
Wgt Avg	10%	20%	30%	40%	50%

% of Cost Supported by U.S.

Change Percentage of Individual Year and Country

Target Country	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Botswana	100%	100%	90%	80%	70%
Cote d'Ivoire	100%	100%	100%	100%	90%
Ethiopia	100%	100%	100%	100%	100%
Kenya	100%	100%	100%	90%	90%
Mozambique	100%	100%	100%	100%	100%
Rwanda	100%	100%	100%	100%	100%
South Africa	100%	100%	90%	80%	70%
Uganda	100%	100%	100%	100%	90%
Namibia	100%	100%	100%	90%	80%
Nigeria	100%	100%	100%	100%	100%
Tanzania	100%	100%	100%	100%	100%
Zambia	100%	100%	100%	100%	100%
Guyana	100%	100%	100%	90%	80%
Haiti	100%	100%	100%	100%	90%
Russia	0%	0%	0%	0%	0%
China	0%	0%	0%	0%	0%
India	0%	0%	0%	0%	0%
Wgt Avg	58%	58%	56%	53%	50%

SAMPLE CHART:

COUNTRIES

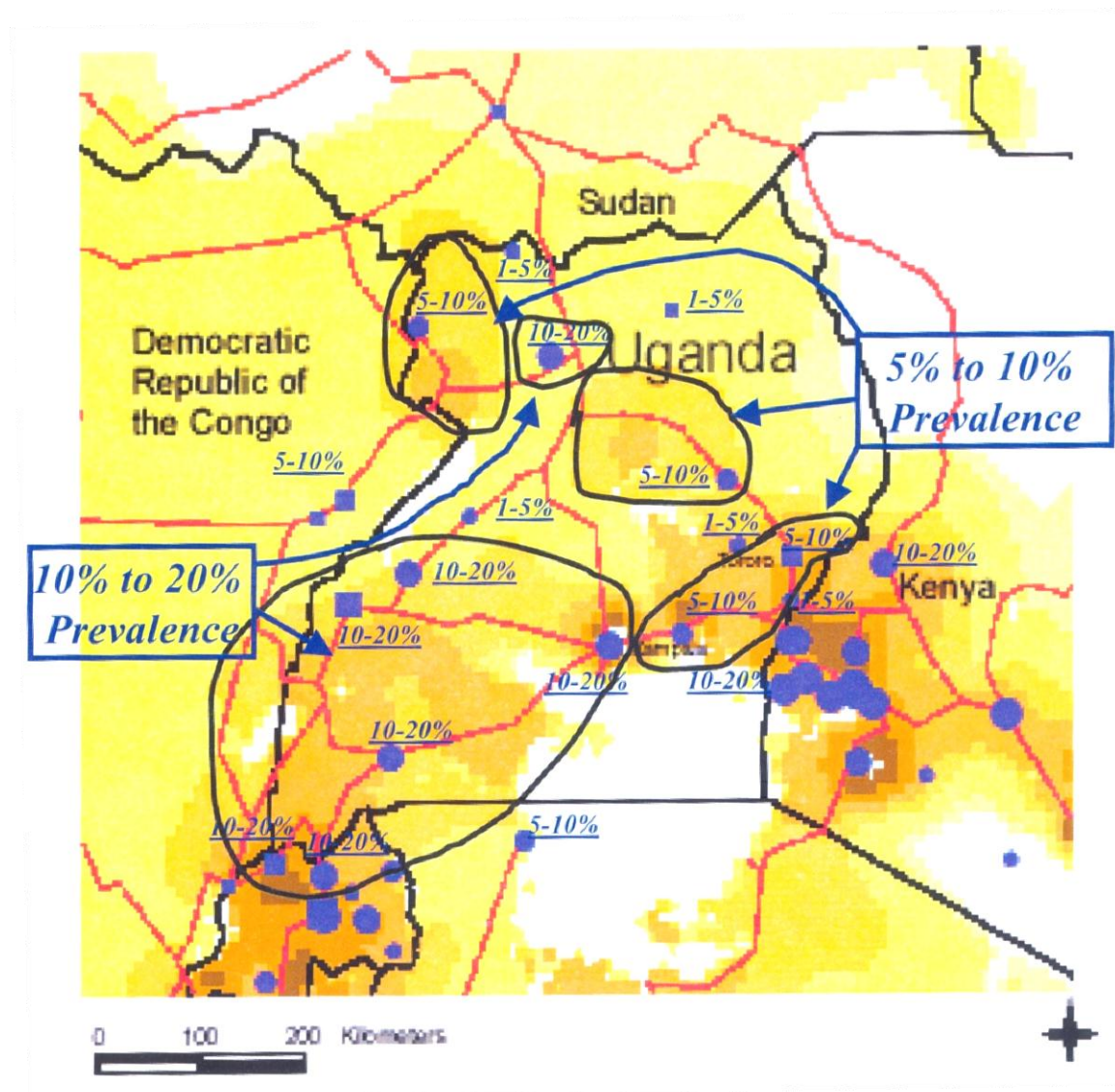
COST SHARING

ASSIGNING TASKS AND PEOPLE TO FACILITIES

	Infrastructure	Personnel	Services
Regional Medical Centers	<ul style="list-style-type: none"> •State of the art labs •High level clinics and hospital 	<ul style="list-style-type: none"> •Specialist doctors and nurses •Trainers •Counselors •Managers •Pharmacists •Lab technologists 	<ul style="list-style-type: none"> •Complete clinical care •Complicated antiretroviral therapy •Manage complicated patients •Plus all below
Primary Satellites	<ul style="list-style-type: none"> •Advanced labs •Advanced clinical care 	<ul style="list-style-type: none"> •Doctors •Counselors •Lab technologists •Pharmacists 	<ul style="list-style-type: none"> •Basic clinical care •Basic antiretroviral therapy •Plus all below
Secondary satellites/ mobile units	<ul style="list-style-type: none"> •Basic labs •Basic clinical care 	<ul style="list-style-type: none"> •Junior doctor, nurse practitioner or medical assistant •Counselors •Basic lab technologists •Pharmacists 	<ul style="list-style-type: none"> •Clinical evaluation •STD, malaria, TB therapy •OI therapy •VCT •PMTCT •Plus all below
Tertiary satellites/ mobile units	<ul style="list-style-type: none"> •Clinical evaluations 	<ul style="list-style-type: none"> •Medical assistant or health visitor 	<ul style="list-style-type: none"> •Home visits •Basic clinical evaluations and follow-up •Adherence Evaluation/DOT •Prevention education •Traditional healers

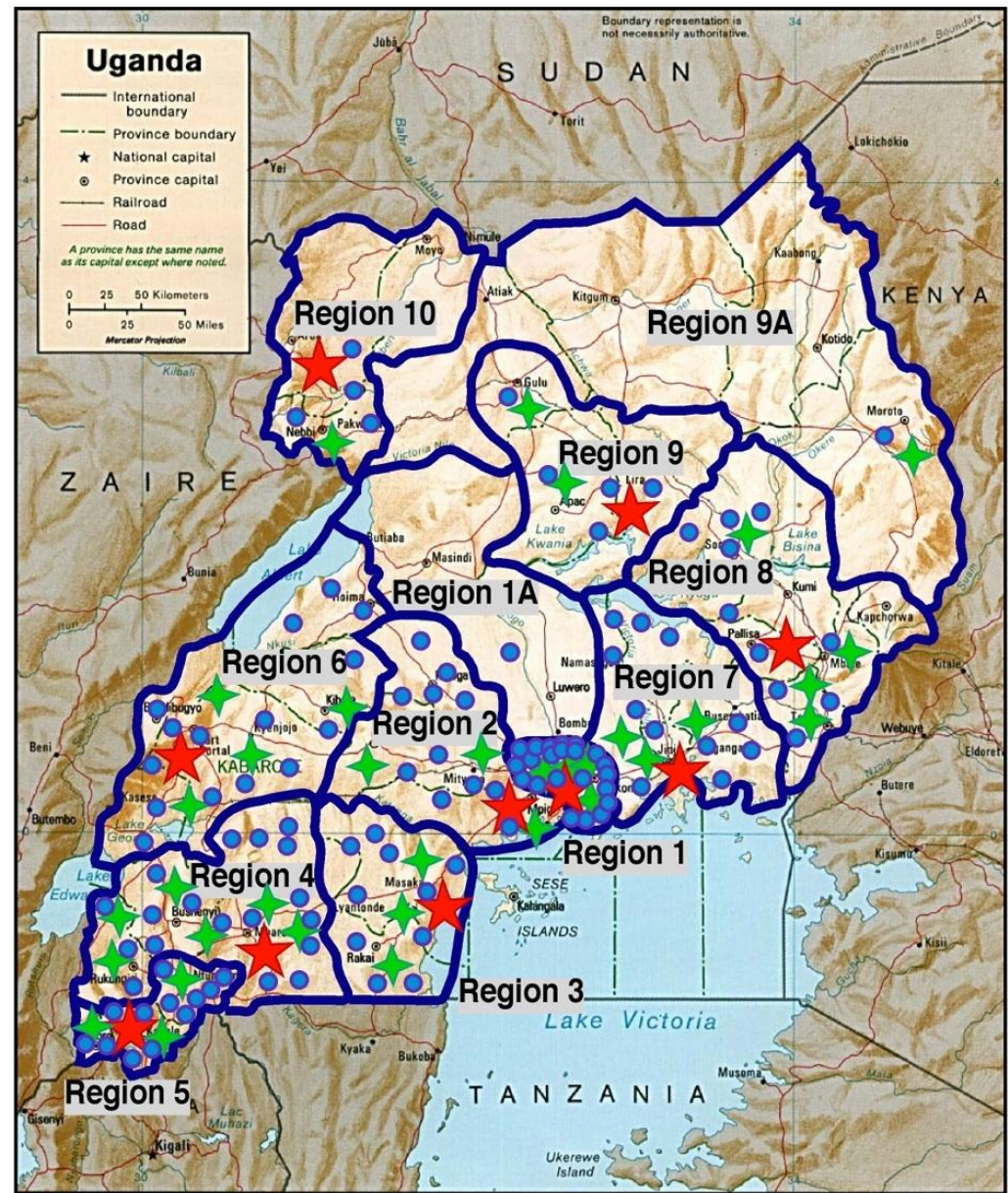
VCT = voluntary counseling and testing; PMTCT = prevention of mother-to-child transmission;
 STD = sexually transmitted diseases; OI = opportunistic infections; DOT = directly observed therapy

MATCHING DISEASE BURDEN TO EXISTING FACILITIES



Areas of High HIV/AIDS Prevalence in Uganda

**EXISTING FACILITIES
PROMOTE EFFICIENT
SCALE-UP**



- ★ Central Medical Center
- ◆ Primary Satellite
- Secondary Satellite

DRAFTING THE FUNDING PLAN: FIVE YEAR SCALE-UP OF ARV DRUGS, PREVENTION, AND CARE

	% WHO Targeted Prevention Population Reached*	% of HIV+ Persons Under Care**	Total # HIV+ Persons Under Care **	# of HIV+ Persons Receiving ARV***	Cost of Prevention****	Cost of Care****	Cost of ARV****	Administrative Costs#	Total Cost##	Total New Money Required###
Year 1	25%	10.0%	1,959,800	391,960	232,159,890	87,751,088	358,100,000	47,460,768	725,471,747	420,471,747
Year 2	50%	20.0%	3,919,600	783,920	464,319,780	175,502,176	716,200,000	94,921,537	1,450,943,493	1,145,943,493
Year 3	75%	30.0%	5,879,400	1,175,880	684,331,725	258,661,620	1,023,720,000	137,669,934	2,104,383,279	1,799,383,279
Year 4	100%	40.0%	7,839,200	1,567,840	885,774,478	334,802,338	1,275,744,000	174,742,457	2,671,063,273	2,366,063,273
Year 5	100%	50.0%	9,799,000	1,959,800	852,707,956	402,879,944	1,493,270,000	192,420,053	2,941,277,953	2,636,277,953
					3,119,293,830	1,259,597,165	4,867,034,000	5-Year Total####	9,893,139,744	8,368,139,744

* % of HIV+ individuals receiving prevention, care and treatment will vary by available infrastructure in each country.

** WHO/UNAIDS 2001 estimates.

*** ARV = Antiretroviral Therapy (assumes 20% of HIV+ population requires ARV therapy).

**** "Costs of Scaling HIV Program Activities to a National Level in Sub-Saharan Africa: Methods and Estimates," March 31, 2001, World Bank

Assumes 7% of total cost.

Assumes \$305 million per year previously allocated or planned for PMTCT initiative, USAID and CDC programs in the targeted countries.

trattoria SORRENTO



"BIG NIGHT"

Tony Fauci hosts a dinner
on November 12, 2002,
for global health leaders
who flew to DC to meet
the Bush Administration

authentic home-style Italian cuisine

THE VALIDATORS AT OMB MEETINGS NOVEMBER 13, 2002



PETER MUGYENYI, UGANDA



PAUL FARMER, HAITI



ERIC GOOSBY, RWANDA



BILL PAPE, HAITI

THE OMB INTERROGATOR AND ANALYST



Robin Cleveland

A WINNING ARGUMENT: THE LAZARUS EFFECT



BEFORE TREATMENT



AFTER ANTI-RETROVIRAL RX

CONFIRMATION FROM AN EXPERIENCED HAND IN GLOBAL HEALTH



NILS DAULAIRE



State of the Union Address, January 28, 2003

■ **President Bush
announces the
Emergency Plan for
AIDS Relief**



PETER MUGYENYI, LAURA BUSH

The President's Emergency Plan for AIDS Relief – \$15B Over 5 Years

Goals:

- Prevent 7 million new infections
- Treat 2 million HIV-infected people
- Care for 10 million HIV-infected people, orphans and other vulnerable children



IMPLEMENTING PEPFAR

IMPLEMENTING PEPFAR

Partners: USG agencies (CDC, USAID, NIH, etc)

Various NGO's

Several universities

Global Fund, UNAIDS, etc

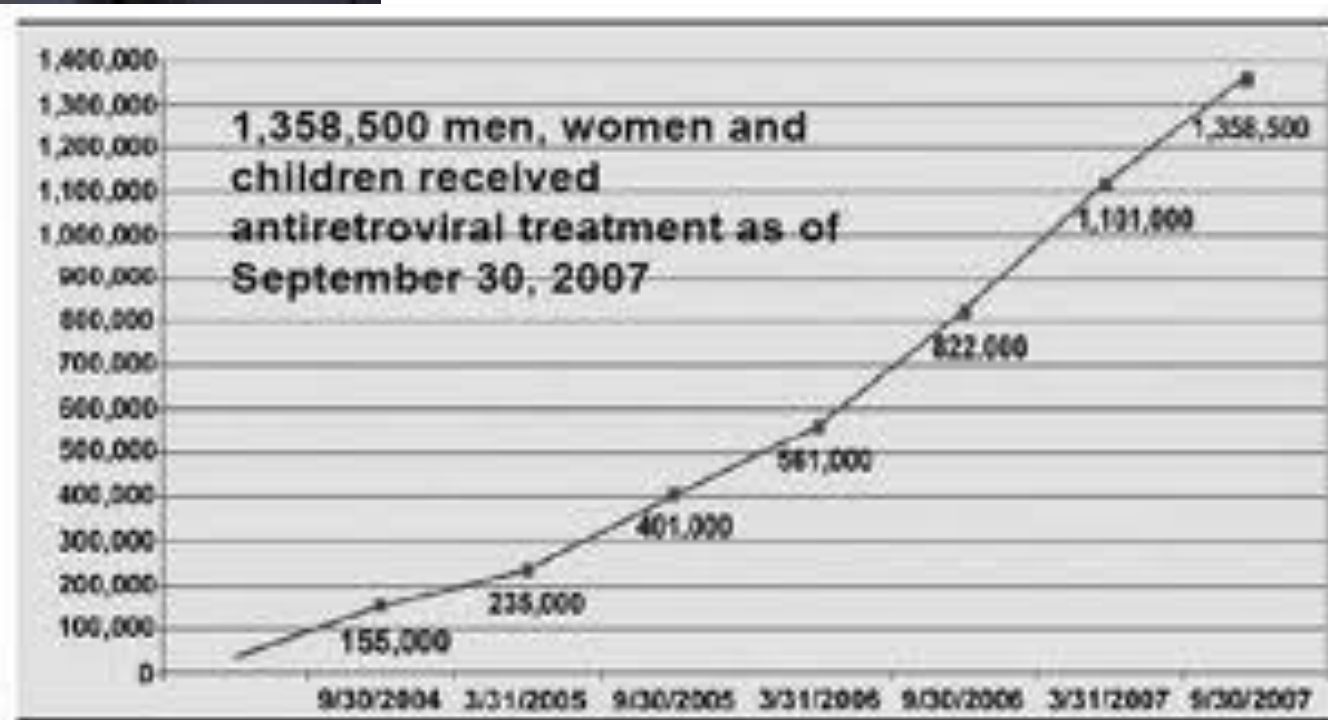
Host countries

PEPFAR ADMINISTRATORS



RANDALL TOBIAS:

ELI LILLY CO.
PEPFAR (2003-7)
USAID
RESIGNATION





MARK DYBAL

NIAID, Assistant to Director

PEPFAR Administrator, 2007-2009

**Global Fund, Executive Director,
2012-present**

CURRENT PEPFAR ADMINISTRATOR

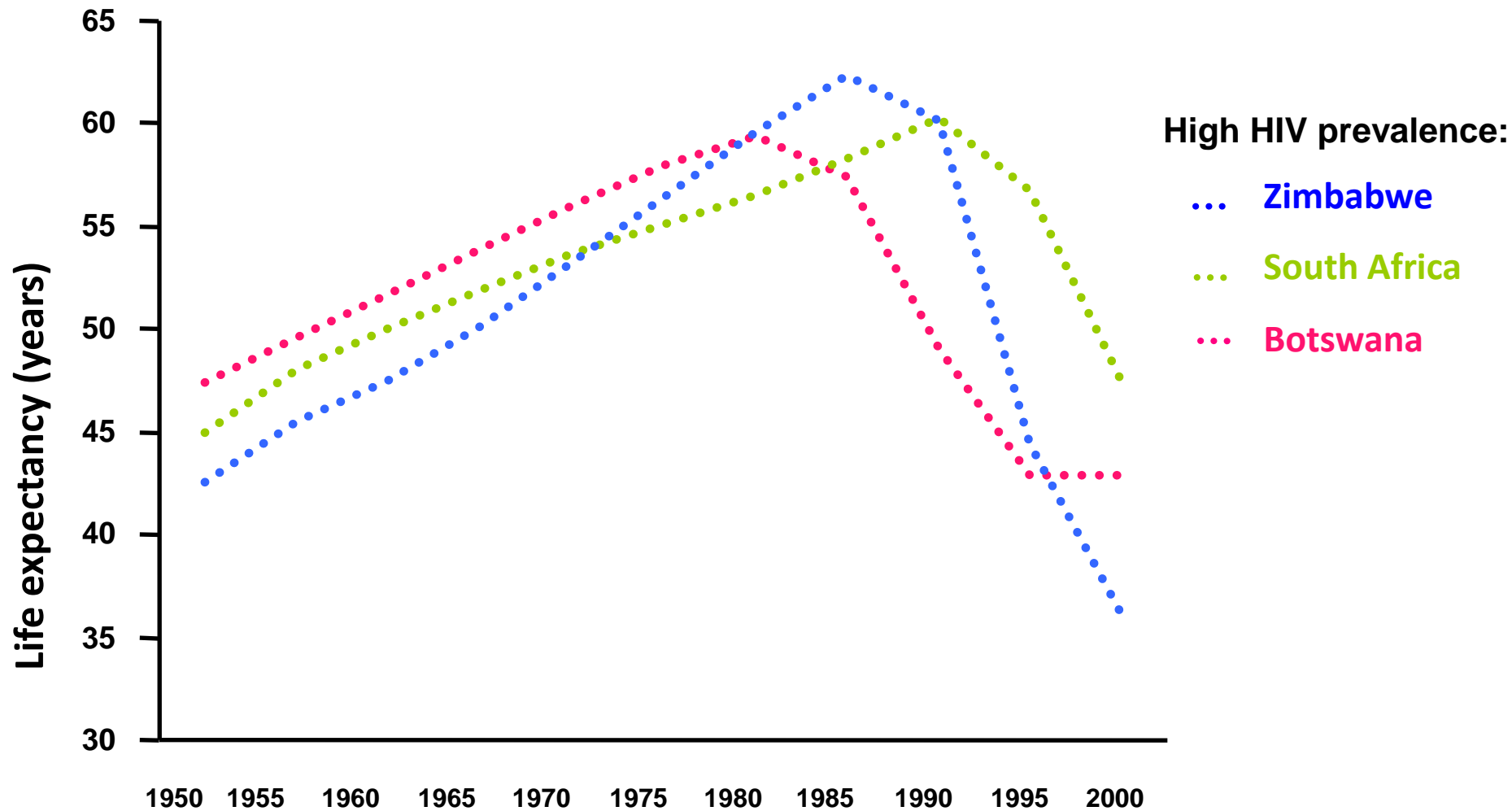


ERIC GOOSBY, 2009-

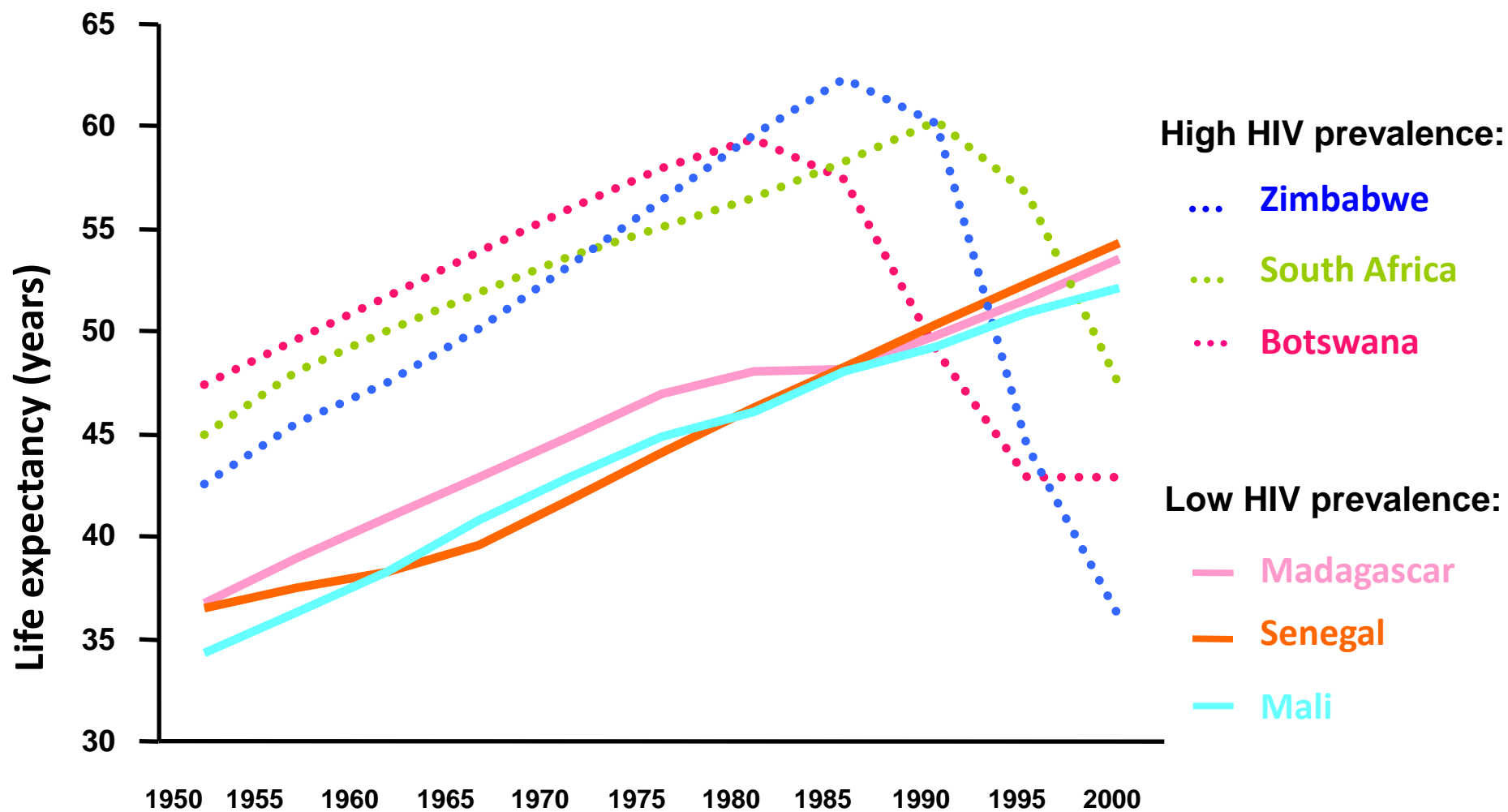
PEPFAR: CURRENT STATUS

- HIGH MARKS FROM INSTITUTE OF MEDICINE
- OVER 5.5 MILLION ON ARV DRUGS
- STRONG PREVENTION AND CARE PROGRAMS
- EXPANSION WITHOUT BUDGET INCREASES
(BETTER PRICES, MORE HOST COUNTRY
PAYMENTS)
- EXPANDED OUTLOOK: IMPLEMENTATION SCIENCE,
ALTERNATIVE USES FOR FACILITIES

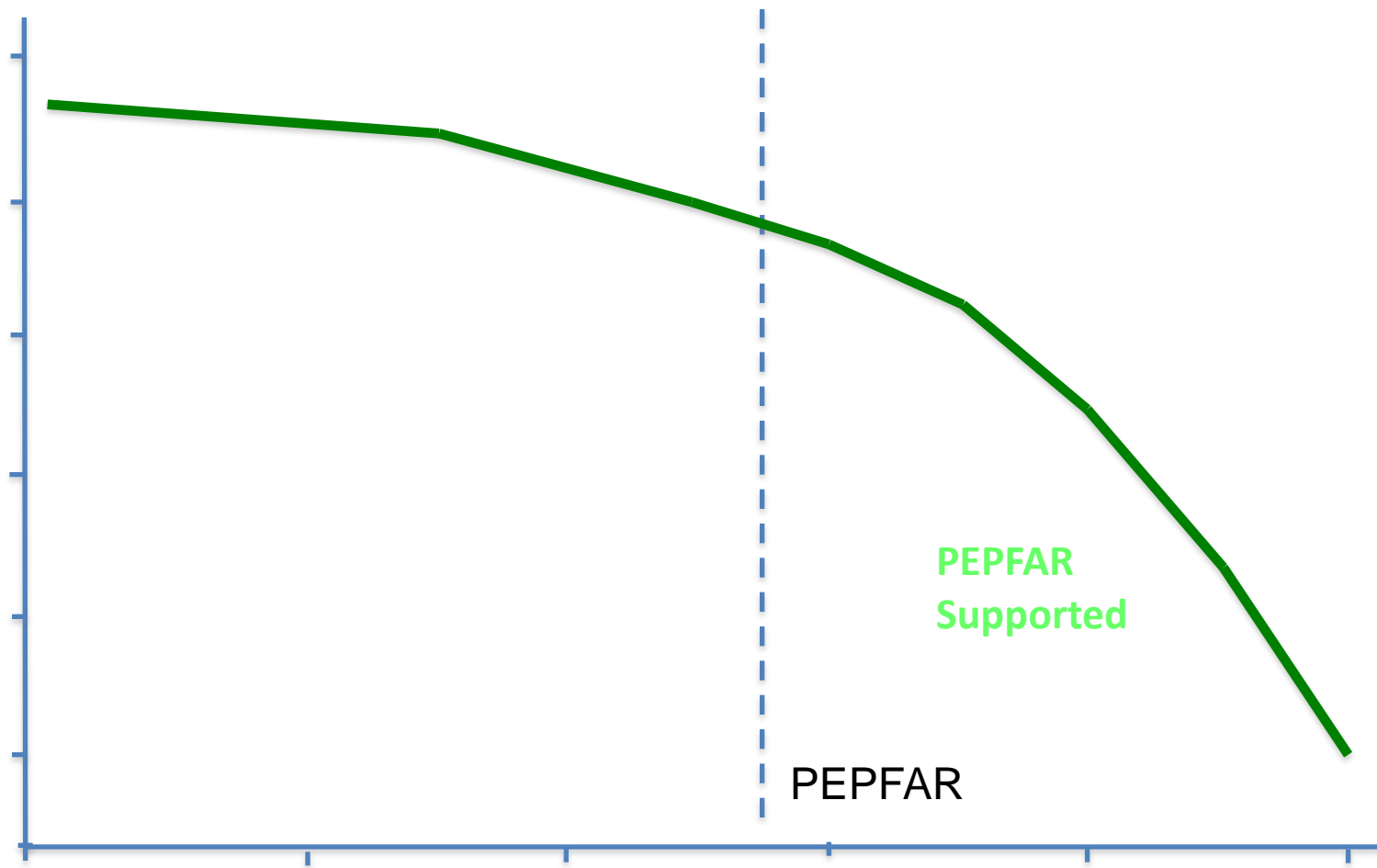
Life Expectancy in Africa



Life Expectancy in Africa



Deaths in PEPFAR-Supported Countries in Africa



Deaths in PEPFAR-Supported Countries in Africa

